

**REMARKS**

Claims 16 to 38 are pending in the application.

**Rejection under 35 U.S.C. 102**

Claims 16-23, 25-35 and 37-38 stand rejected under 35 U.S.C. 102(b) as being anticipated by Ohara et al. (*US 5,770,682*).

According to the examiner, the reference discloses a method for producing a polyester from a cyclic monomer wherein the polymerization is conducted in the presence of an initiator in the form of an organo tin compound wherein at the desired degree of polymerization a phosphinic acid derivative is added.

Claims 16 and 30 have been amended by deleting M<sup>II</sup> for R<sub>3</sub>.

The cited reference discloses a method for producing polylactate in the presence of organo-tin compounds as an initiator. When the desired average molecular weight of about 50,000 has been reached, compounds are added to lower the catalytic activity of the initiator and prevent decomposition/depolymerization of the product. These compounds according to the cited reference are phosphoric acid, phosphonic acid and their derivatives; see col. 5, lines 15, 16; col. 5, lines 24-25. The examiner points out that phosphinates are mentioned.

It is respectfully submitted that the cited reference discloses as the only phosphinate the compound calcium phosphinate at four locations within the entire disclosure: in the list of compounds in col. 5, line 33, line 38; claim 18: col. 21, lines 12-13; col. 22, lines 3-4 (the second appearance in the list and in claim 18 is a duplicate entry - actually, the calcium phosphinate is therefore mentioned only twice - once in the list of compounds and once in claim 18). In none of the examples calcium phosphinate is used.

Aside from the specific component Ca phosphinate, no other phosphinate or phosphinic acid or phosphinic acid derivative is mentioned. The cited reference sets forth the use of phosphoric acid or phosphorus acid or the derivatives thereof: col. 5, lines 15-16; lines 24-25. All of the examples are based on phosphoric acid or phosphorous acid derivatives (phosphates and phosphites).

Phosphoric acid (P in an oxidation state V) cannot have any substituent R<sub>1</sub> or R<sub>2</sub> bonded to P because of its structure. Phosphorous acid (P in the oxidation state III) can

have only one substituent  $R_1$  or  $R_2$  bonded to P because of its structure. Phosphinic acid derivatives as they are used in the present invention are provided with substituents  $R_1$  or  $R_2$  on P and phosphorus has an oxidation state of I in phosphinates.

Because of the low oxidation state, the phosphinates used in the present invention in comparison to phosphates and phosphites proposed in *Ohara et al.* have a reducing effect on the organo-tin compound used as a catalyst. This is disclosed in the specification, page 5, last paragraph, lines 4-11. The derivatives of phosphoric acid and phosphorous acid proposed by *Ohara et al.* certainly have a different reaction mechanism for suppressing the catalytic activity of the tin catalyst because of their higher oxidation state. Phosphoric and phosphorous acid derivatives react primarily by forming (insoluble) salts.

Calcium phosphinate is not within the proposed class of substances for suppressing the catalytic effect - it appears to be in error and is clearly an outlier in regard to the substances proposed in *Ohara et al.*

The mention of only a single **specific** phosphinate without even mentioning generally the use of phosphinates or providing a further example cannot suggest or make obvious other phosphinate compounds.

Reconsideration and withdrawal of the rejection of the claims 16-23, 25-35 and 37-38 pursuant to 35 USC 102 are therefore respectfully requested.

**Claim Rejections - 35 U.S.C. 112**

Claims 16 and 30 stand rejected under 35 U.S.C. 112, 2nd paragraph, as being indefinite.

In regard to claim 16 and 30, the wording "obtainable from" is considered confusing because it is not clear when or under what circumstance the copolyester is obtained. In claim 16 "obtainable" has been deleted; in claim 30 "obtainable" has been changed to "polymerized" as this is the process of preparing the polyester from the monomer.

In regard to claim 16, the examiner further objects to the wording "adding at the latest at a point in time". Applicant believes that this wording is neither confusing nor indefinite. The phosphinic acid/derivative can be added at the time of reaching the desired degree of polymerization but it can also be added before the desired degree of polymerization is reached as long as the polymerization has not yet resulted in the desired

degree of polymerization; see specification, page 5, last paragraph, lines 4-9. An addition during the polymerization reaction after the desired degree of polymerization has been reached and surpassed has no effect because the degree of polymerization is of course not decreased by adding the phosphonic acid/derivative.

Reconsideration and withdrawal of the rejection of the claims 16 and 30 pursuant to 35 USC 112 are therefore respectfully requested.

#### **ALLOWABLE SUBJECT MATTER**

Claims 24 and 36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant appreciates examiner's suggestion of allowable subject matter but is of the opinion that the claims 16 and 30 as amended define properly over the cited art.

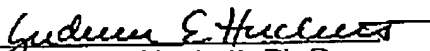
#### **CONCLUSION**

In view of the foregoing, it is submitted that this application is now in condition for allowance and such allowance is respectfully solicited.

Should the Examiner have any further objections or suggestions, the undersigned would appreciate a phone call or e-mail from the examiner to discuss appropriate amendments to place the application into condition for allowance.

Authorization is herewith given to charge any fees or any shortages in any fees required during prosecution of this application and not paid by other means to Patent and Trademark Office deposit account 50-1199.

Respectfully submitted on July 13, 2006,

  
Ms. Gudrun E. Hockett, Ph.D.  
Patent Agent, Registration No. 35,747  
Lönsstr. 53  
42289 Wuppertal  
GERMANY  
Telephone: +49-202-257-0371  
Facsimile: +49-202-257-0372  
gudrun.draudt@t-online.de

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